

WHAT IS CLAIMED IS:

- 1 1. An interface method for viewing and selecting among a variety of currently
2 available commercial broadcasts comprising the steps of:
3 determining an association of each said commercial broadcast
4 with a program category; and
5 within a single viewing screen, simultaneously presenting video
6 broadcast information directly from each of said commercial broadcasts,
7 including:
8 (1) generating reduced-scale presentations of each of said
9 commercial broadcasts, said reduced-scale presentations being based on
10 said video broadcast information; and
11 (2) dynamically clustering said reduced-scale presentations in
12 correspondence with said program categories, including displaying a plurality
13 of clusters of said reduced-scale presentations in which each said cluster
14 includes said reduced-scale presentations for all of said commercial
15 broadcasts associated with said program category that corresponds to said
16 cluster;
17 thereby utilizing said viewing screen to display each said cluster
18 as a totality of said commercial broadcasts that are currently available within
19 said program category that corresponds to said cluster.
- 1 2. The interface method of claim 1 wherein said step of dynamically
2 clustering includes varying a number of said reduced-scale presentations in
3 said clusters as a function of changes in said commercial broadcasts.
- 1 3. The interface method of claim 2 wherein said commercial broadcasts are
2 television broadcasts carried via television channels, said step of determining
3 associations including monitoring reception of said television channels at a
4 location of said viewing screen to detect tag information that is specific to
5 current programs available via said television channels.
- 1 4. The interface method of claim 1 further comprising a step of enabling a
2 user to initiate a genre-dividing mode in which at least one said cluster is split
3 into separate sub-clusters on a basis of genres.

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1 5. The interface method of claim 4 wherein said step of enabling said user
2 includes providing cluster splitting into said sub-clusters on the basis of
3 different sports and on the basis of different movie genres.

1 6. The interface method of claim 1 wherein said step of presenting said video
2 broadcast information includes overlapping said reduced-scale presentations
3 within at least one said cluster, said interface method further comprising steps
4 of:

- 5 (1) enabling a user to select which said reduced-scale
6 presentation in said at least one cluster has the appearance of being the
7 foremost reduced-scale presentation; and
8 (2) enabling said user to select any said reduced-scale
9 presentation in any said cluster for viewing in a full-screen mode of operation.

1 7. The interface method of claim 6 further comprising steps of:
2 maintaining historical information regarding user selections; and
3 arranging said clusters and arranging said reduced-scale
4 presentations within said clusters as a function of said historical information.

1 8. The interface method of claim 6 further comprising a step of cycling an
2 arrangement of said overlapping reduced-scale presentations in said at least
3 one cluster such that each said overlapping reduced-scale presentation is
4 periodically said foremost reduced-scale presentation.

1 9. The interface method of claim 1 wherein said step of generating said
2 reduced-scale presentations includes displaying incoming television programs
3 in real time, such that said reduced-scale presentations are dynamic.

1 10. The interface method of claim 9 wherein said step of generating includes
2 filtering television commercials, such that said reduced-scale presentations
3 are static during said television commercials.

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1 11. An interface method for viewing and selecting among a variety of
2 television channels comprising the steps of:
3 receiving program transmissions via said television channels;
4 recurrently identifying a program category for each said
5 television channel on a basis of a currently available program being broadcast
6 via said television channel;
7 generating reduced-scale presentations of each said currently
8 available program from video signals of said currently available program;
9 displaying each said presentation on a single screen, including
10 grouping said presentations on a basis of said program categories, thereby
11 displaying a number of groups that corresponds to the number of program
12 categories, with each well populated group having overlapping presentations;
13 enabling a viewer to remotely control browsing through said
14 groups and browsing among said presentations within a specific group; and
15 enabling said viewer to select a particular said presentation for
16 full-screen viewing of the program from which said particular presentation was
17 generated.

1 12. The interface method of claim 11 further comprising a step of arranging
2 said groups and said presentations within said groups as a function of
3 historical information that is representative of prior selections by said viewer.

1 13. The interface method of claim 11 further comprising a step of enabling
2 said viewer to selectively increase or decrease said number of groups by
3 increasing or decreasing said number of program categories.

1 14. The interface method of claim 13 wherein said step of enabling increases
2 includes providing cluster splitting according to genres and includes merging
3 previously split clusters.

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1 15. A system for viewing and selecting among a variety of currently available
2 commercial broadcasts comprising:

3 a detector configured to identify each said commercial
4 broadcast with a program category;

5 a video processor connected to receive said commercial
6 broadcasts and configured to output reduced-scale presentations of said
7 commercial broadcasts, said reduced-scale presentations being video
8 broadcast information; and

9 a viewing screen cooperative with said detector and said video
10 processor to display said reduced-scale presentations in clusters that have a
11 one-to-one correspondence with said program categories, with all of said
12 commercial broadcasts that are identified with one of said program categories
13 being simultaneously displayed.

1 16. The system of claim 15 wherein said video processor is configured to
2 realign said reduced-scale presentations in response to detection by said
3 detector of a change in a commercial broadcast from a first program category
4 to a second program category.

1 17. The system of claim 15 wherein said video processor is configured to
2 continuously update said video broadcast information relevant to each said
3 reduced-scale presentation.

1 18. The system of claim 17 further comprising a commercial filter enabled to
2 detect commercials and to inhibit said continuous updating during commercial
3 times.

1 19. The system of claim 15 further comprising memory connected to store
2 historical information indicative of selections of said commercial broadcasts
3 by a viewer, said memory being accessed by said video processor to control
4 arrangement of said clusters and said reduced-scale presentations within said
5 clusters as a function of said historical information.